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AUTHOR Dziuban, Charles; Sullivan, Timothy
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ABSTRACT

Twenty-three teaching competencies identified as "essential" in a state-wide teacher survey by Florida's Council on Teacher Education (COTE) are reexamined as an aid in producing valid and assessable programs for teacher education. Three hundred and fifty central Florida teachers were questioned to rate the competencies on an essential-unessential scale and the data were assessed to determine the degree of consensus. Results of the survey indicate that (1) teachers view the COTE competencies as generally essential; (2) there are probably not as many general areas as the Council has proposed; (3) there is communality of the areas across teaching levels; (4) differences exist in the perceptions of the areas among various teaching level groups; and (5) currently, the Florida county districts are generally placing emphasis for teacher evaluation on behaviors such as diagnosis of knowledge levels, identification and structuring of objectives, adoption of instructional materials, classroom assessment, and counseling and interpersonal skills. Ten tables are included in the appendix, giving detailed results of the sample survey. (MB)

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Introduction

For the past five or six years teacher educators at both the preservice and inservice levels have lived with a most frustrating quandary. They have felt they've known the essence of what they needed to know but have been unable to prove the validity of their knowledge nor gain general acceptance from teachers for their ideas. They have wrestled with the dusty, old question "what is an effective teacher?" During the past few years they have concentrated on a seemingly simplistic answer, and they have struggled to give it form and order. Their answer is "competencies," but the management, validation and acceptance level of such an answer is excruciatingly complex.

Some teacher educators have aggressively broached competency tenets while some institutions and staff development personnel have invested massive human and financial resources into packaging teacher competency programs. Many of these, however, are now stalled or careening because they seem to suffer some of the problems of teacher competency: identification, acceptance, evaluation, implementation and development.

Today many teacher educators are trying to meet impeding arguments with validated proofs. One such group is the State of Florida Council on Teacher Education (C.O.T.E.). In the past year C.O.T.E. conducted a diligent research effort involving more than five thousand teachers, administrators, and educators throughout the State.

The organization began its study by researching the vast majority of work that had been done on teacher competency, synthesizing that information and preparing a consensus listing of eighty-four competency statements. A

grouping of 484 teachers helped prepare a questionnaire incorporating the competency statements in a language and format acceptable to their peers. Following activities to establish a valid and reliable response frame for the questionnaire, development of a statement point scale, and a test of reliability, the competency statements were administered statewide on the finalized questionnaire.

Approximately 5% of all certified personnel in Florida were randomly selected to represent proportionally the professional population in each of the State's 67 districts. C.O.T.E. established a professional consensus criterion for determining what would be considered essential. "The criterion was that 85% of the respondents must mark a competency to be 'always necessary,' (i.e., I have to use it frequently every day) or 'frequently necessary,' (i.e., I have to use it at least once each day) in my job role (the highest points on the five-point scale) with at least 51% of the 85% marking it as 'always necessary'." Using the 85%/51% criterion, twenty-three of the forty-eight competencies were designated as essential. As a result of its study, C.O.T.E. proposed the twenty-three competencies essential to a successful teacher. They referred to these as "the knowledge and skills deemed essential for teaching irrespective of subject matter or age of pupils."

C.O.T.E. recommended, and the State Commissioner of Education endorsed, several courses of action which may have profound importance for teacher education in Florida, and perhaps the nation. The recommendations basei on the twenty-three essential competencies included using these behaviors as basic criteria for State approval of preservice as well as inservice

teacher education programs. They further encouraged that: statewide professional organizations recommend strategies for the utilization of the competencies in improving teacher effectiveness; research and development activities be conducted to validate various training and assessment strategies for the competencies; similar statewide studies be conducted to identify and gain professional acceptance for additional competencies that are essential for effective classroom teaching at a given subject or grade level.

State of Florida Council on Teacher Education's Twenty-Three Essential Competencies

Communication Skills

1. Demonstrate the ability to orally communicate information on a given topic in a coherent and logical manner.
2. Demonstrate the ability to write in a logical, easily understood style with appropriate grammar and sentence structure.
3. Demonstrate the ability to comprehend and interpret a message after listening.
4. Demonstrate the ability to read, comprehend, and interpret professional material.

Basic General Knowledge

5. Demonstrate the ability to add, subtract, multiply and divide.
6. Demonstrate an awareness of patterns of physical and social development in students.

Technical Skills

7. Diagnose the entry knowledge and/or skill of students for a given set of instructional objectives using diagnostic tests, teacher observations, and student records.

8. Identify long-range goals for a given subject area.
9. Construct and sequence related short-range objectives for a given subject area.
10. Select, adapt, and/or develop instructional materials for a given set of instructional objectives and student learning needs.
11. Select/develop and sequence related learning activities appropriate for a given set of instructional objectives and student learning needs.
12. Establish rapport with students in the classroom by using verbal and/or visual motivational devices.
13. Present directions for carrying out an instructional activity.
14. Construct or assemble a classroom test to measure student performance according to criteria based upon objectives.

Administrative Skills

15. Establish a set of classroom routines and procedures for utilization of materials and physical movement.
16. Formulate a standard for student behavior in the classroom.
17. Identify causes of classroom misbehavior and employ a technique(s) for correcting it.
18. Identify and/or develop a system for keeping records of class and individual student progress.

Interpersonal Skills

19. Counsel with students both individually and collectively concerning their academic needs.

20. Identify and/or demonstrate behaviors which reflect a feeling for the dignity and worth of other people including those from other ethnic, cultural, linguistic, and economic groups.
21. Demonstrate instructional and social skills which assist students in developing a positive self-concept.
22. Demonstrate instructional and social skills which assist students in interacting constructively with their peers.
23. Demonstrate teaching skills which assist students in developing their own values, attitudes, and beliefs.

C.O.T.E. offered one caveat concerning the competencies: "No reference was intended to any particular way of organizing learning experiences for the achievement of these competencies, i.e., competency-based teacher education or any other designated curriculum form." It is difficult to avoid the inferential leap, despite the warning. Current literature, curriculum projects, and programs concerning teacher education manifest a singularly popular acceptance of competency-based teacher education. It is evident that the twenty-three C.O.T.E. competencies constitute a clearcut statement of what a teacher should be able to do to achieve success, and may, in fact, form the basis for teacher evaluation.

The problem at this point in time, and undoubtedly the reason for C.O.T.E.'s concern is these competencies are still general and cannot clearly be the basis for competency-based instruction. In addition, they raise a specter of evaluation which is of much concern to teachers and to which we will further allude in this study. Robert Howsam has defined competency-based instruction: "Two characteristics are essential to the concept of

competency-based instruction. First, precise learning objectives--defined in behavioral and assessable terms--must be known to learner and teacher alike." He further notes, "competency-based programs, on the other hand, identify the objective, the criteria, the performance indicators, and the criteria levels so clearly for the student that he can assess for himself whether or not the objectives have been met." Clearly evaluation will play a crucially important role in all aspects of teaching competencies.

Assessment on a local or state basis may in effect direct the restructuring of preservice and staff development programs. These competencies then, if accepted for training and evaluative purposes in Florida, surely suggest a possible adoption in other states. The question then emerges, "How can these competencies be correctly processed so as to produce valid and assessable programs?" It is to the point of this question that our study begins to address itself.

In this study we attempted to determine: if there is general support for the C.O.T.E. competencies; if there is substantial disagreements among elementary, junior high, and high school teachers as to the importance of the competencies; the underlying organizational dimension of the perception of the teachers toward the twenty-three competencies. This then is an effort to examine the bases of these competencies and simultaneously look at additional pertinent dimensions before further action may be undertaken.

Procedures

An instrument specifying the twenty-three C.O.T.E. competencies was distributed to a sample of three hundred fifty (350) public school teachers

in the Central Florida area (Orange, Seminole, Osceola, Brevard, Volusia and Lake Counties). Each teacher was asked via a five point Likert scale to indicate the degree to which he or she felt that each was essential to a successful teacher. The range of possible responses varied between very unessential to very essential. The respondents represented three different levels--elementary, middle, and senior high. Since personal contact was made with the participants by representatives of the investigators', a high response rate was achieved (93%)(elementary - 180)(junior high = 76) (high school = 69). The twenty-five non-respondents' reasons for their unwillingness to complete the instrument were determined and will be commented upon in a later section of this paper.

The individual item means, variances, and standard deviations were determined for each of the teaching groups. This was used as an initial screening procedure to intuitively assess the degree to which there was consension--that is, if large discrepancies were obtained for all twenty-three competencies, subsequent hypotheses and post hoc comparisons appropriate for the unequal sample sizes would have been undertaken.

Subsequently the inter-item correlation matrix was computed and the data set tested for psychometric adequacy with the Kaiser (1970) Measure of Sampling Adequacy (MSA). The Index is a function of two correlation matrices --Q those of the anti image correlations and R the original sample matrix.

Q is defined as $SR^{-1}S$ where an element $S^2 = \left[\text{Diag } R^{-1}\right]^{-1}$. The overall Index for a given sample correlation matrix is defined as:

$$MSA = \frac{\sum\sum_{j \neq k} r^2_{jk}}{\sum\sum_{j \neq k} r^2_{jk} + \sum\sum_{j \neq k} q^2_{jk}}$$

The Index ranges between zero and one with values in the .90's signaling data which are particularly appropriate for factor analytic procedures. There is also defined an individual MSA which is simply a function of the same variable row in each matrix. This gives an indication of the degree to which a particular variable "belongs to the family" psychometrically. Several studies (Dziuban and Shirkey, 1974; Kaiser and Cerny, In Press) have been conducted which indicate that the Index improves with the quality of one's data. It has been recommended (Dziuban and Shirkey, 1976) as the logical first step in any factor analytic study.

Upon this determination, the correlation matrix was subjected to the Harris (1962) rescaled image analysis procedure. The raw components were transformed according to the Harris-Kaiser independent cluster solution. Raw pattern coefficients in Kaiser's originally scaled pattern absolutely greater than 1.00 were used for interpretation purposes. The objective of this procedure was to assess the validity of the original six sub areas as determined by the Florida Council on Teacher Education. Upon determination of the constructs presented in the total sample, they were derived within each of the teaching levels and compared for similarity with the coefficient outlined by Wrigley and Neuhaus (1955). The component scores for the individuals

in each group were derived and a sample of sixty teachers from each randomly selected. With the component scores as criterion measures, a multivariate analysis of variance was performed to test the existence of differences among the groups. In addition univariate and step down F ratios were computed.

Supplementary statistics were derived for the image analysis. The overall and individual indices of factorial simplicity were determined. The indices (Kaiser, 1974) signal the complexity of an overall pattern or variable in the solution. The squared multiple correlations of each variable with the remaining P - 1 were determined as well as the individual and overall root mean square correlations.

Once the constructs associated with the competencies were identified, the teacher evaluation forms currently utilized in the counties in Florida were obtained.[1] Those documents were content analyzed to determine the degree to which the districts were emphasizing the constructs identified by C.O.T.E. as basic to the teaching domain. It was sought then through these procedures to determine whether there existed consensus among the teacher groups as to the essentiality of the competencies. Through their perceptions, it was sought to identify the components underlying the competencies, and finally it was sought to determine the degree to which the school districts in Florida are presently assessing those constructs.

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[1]We wish to thank Dr. Arthur J. Collier of the Florida State Department of Education for providing us with many of the copies of the county evaluation forms.

Results

The means and standard deviations for each of the competencies by teaching level are presented in Table I, together with their portrayal in Graph I. Some general intuitive trends are obvious. First, the teachers at all levels feel that most of the competencies specified are essential or very nearly so for effective teaching. Most of the competencies were placed well above the midpoint of the scale. Further, it may be observed that there was a rough general correspondence among the group profiles with two obvious exceptions. The elementary teachers rated competency three substantially lower than the junior high or high school groups (elementary $\overline{X}$ = 2.26 compared to junior high $\overline{X}$ = 3.39 and high school $\overline{X}$ = 3.34). That skill was involved with the ability to comprehend and interpret a message after listening. The other fairly obvious deviation was for competency number seventeen where the elementary group rated substantially higher (elementary $\overline{X}$ = 3.75 compared to junior high $\overline{X}$ = 3.41 and high school $\overline{X}$ = 3.06). This item was related to the identification and correction of classroom misbehavior problems.

The results of the total sample item image analysis is presented in Table II. The overall Measure of Sampling Adequacy of .95 together with an overall Index of Factorial Simplicity of .90 indicated that the item responses comprised an adequate psychometric sample and the resulting pattern did not yield results which were overly factorially complex. The individual Measures of Sampling Adequacy showed that each one of the items under consideration belonged to the domain of interest (teaching). Inspection of the pattern matrix shows three main components. They are summarized as follows:

Component One	Pattern Coefficient
1. Demonstrate the ability to communicate orally.	.83
2. Demonstrate the ability to write.	1.00
3. Demonstrate the ability to comprehend and interpret a message.	.58
4. Demonstrate the ability to read.	.71
5. Demonstrate the ability to add, subtract, multiply and divide.	.84
12. Establish rapport using verbal and visual devices.	.54
13. Present directions for carrying out an instructional activity.	.71
16. Formulate a standard for student behavior in the classroom.	.50
17. Identify causes for classroom misbehavior and employ techniques for correcting it.	.72

This component which accounted for 43.02% of the variance (relative) cut across four of the original areas defined by C.O.T.E.--Communication Skills, Basic General Knowledge, Technical Skills, and Administrative Skills. The underlying conceptual relationship of these variables seems quite clear. The items define basic cognitive skills--reading, writing, etc.--plus the basic tools needed to function as a teacher--carrying out instruction, dealing with misbehavior, etc. These behaviors are prerequisite if any teacher is to function effectively in that role. Accordingly, this component was named The Teacher with the Fundamental Tools of Education.

Component Two	Pattern Coefficient
17. Identify causes of classroom misbehavior and employ techniques for correcting it.	.40
19. Counsel students both individually and collectively concerning their academic needs.	.59
20. Identify and/or demonstrate behavior which reflects a feeling for worth of other people.	.86
21. Demonstrate social skills which assist students in developing a positive self-concept.	.79

Component Two (cont'd)	Pattern Coefficient
22. Demonstrate instructional and social skills which assist students in interacting constructively with their peers.	.87
23. Demonstrate teaching skills which assist students in developing their own values, attitudes and beliefs.	.81

The second component (29.98% of the variance) synthesized two of the originally defined areas--Administrative Skills and Interpersonal Skills. The items of this component hold a clear relationship to requisite interpersonal skills of a teacher. They relate to the teacher's ability to facilitate students in processing their own values, beliefs, and feelings regarding themselves and their environment. Obviously this component is Interpersonal Skills.

Component Three	Pattern Coefficient
8. Identify long-range goals for a given subject area.	.56
9. Construct sequence related short-range goals.	.90
10. Select, adopt and/or develop instructional materials for a given set of objectives.	.80
11. Select/develop instructional materials appropriate for a given set of instructional objectives.	.89
14. Construct a classroom test to measure student performance.	.63

The third component (28% of the variance) placed the teacher in the planning, diagnosis and assessment role. They relate to the teacher's ability to organize and evaluate her efforts. This component was named Technical Skills - The Teacher in the Diagnosis and Planning Process. An interesting and "significant" finding arises here, however. Competency number seventeen--identification and correction of classroom misbehavior was originally assigned to the Administrative Skill area by C.O.T.E. Inspection of Table II, however, shows that it is related to two components--Fundamental Skills and Counseling. Inspection of its individual Index of Factorial

Simplicity shows it to yield the lowest value of all the variables (.48)--clearly unacceptable. In the factor analytic context it is too complex. Conceptually interpreted this simply indicates that teachers tend to view discipline from two varying perspectives. The first is that it is a basic skill--something they should know "how to do." The second group apparently would cast discipline as a problem which is best resolved within the counseling context.

The final total group component accounting for 27.01% of the variance was related to five of the competencies originally specified as Technical Skills. The items are related to the teacher in the assessment and preparation phases of teaching. The component has been termed Technical Skills - The Teacher in the Diagnosis and Planning Process.

In spite of the fact that they failed to reach salience on more than one component, several other competencies exhibited substantial complexity. Competency number six (IFS = .55), for instance, "Demonstrate an awareness of physical and social development," failed to load on any of the three components but was spread out between Fundamental Skills and Diagnosis. A similar trend was noted for competency seven (IFS = .63), "Diagnose the entry knowledge and/or skill of students for a given set of instructional objectives using diagnostic tests, teacher observations, and student records." Similarly component number sixteen (IFS = .64), "Formulate a standard for student behavior in the classroom," showed a strong relationship to Fundamental and Technical Skills. Finally, skill number nineteen (IFS = .48) yielded a substantial relationship to Fundamental Skills and Counseling.

The derived image components for the elementary school sample (N = 180) are presented in Table III. Once again the overall MSA of .94 and IFS of .95

showed these data to be of hign psychometric quality. The resulting pattern matrix revealed a very high correspondence to the overall sample pattern matrix. The first component was clearly that of "Interpersonal Skills," while the second corresponded almost exactly to "Technical Skills." The finally retained component for the elementary school sample combined the areas of Communication Skills, Basic General Knowledge, Technical Skills, and Administrative Skills. This component, as in the total sample, was best named the Fundamental Tools of Education.

The individual Measures of Sampling Adequacy put all of the competencies in the excellent range. The competencies, however, needed scrutiny as to their factorial complexity. Once again item number seven (IFS = .50), "Diagnose entry or knowledge level of students," appeared to split between Interpersonal and Technical Skills. Item number twelve (IFS = .50), "Establish rapport with students in the classroom," was very complex with respect to Technical Skills and Fundamental Skills. Competency number fifteen (IFS - .53), "Establish a set of classroom routines and procedures," exhibited a similar pattern of complexity.

The derived component solution for the junior high school sample (N = 76) is presented in Table IV. The overall MSA of .78 and IFS of .80 supported the psychometric quality of the data yielded by this sample. The pattern matrix, however, yielded six components rather than the three which had been previously encountered. The first was comprised by the following variables:

Component One	Pattern Coefficient
20. Identify and/or demonstrate behaviors which reflect a feeling of dignity.	.54

Component One (cont'd)	Pattern Coefficient
21. Assist student in developing a positive self-concept.	.85
22. Helping students get along with peers.	.96
23. Help students develop their own goals and attitudes.	.63

This component is comprised of four of the original variables and was named Interpersonal Skills.

The second component was comprised of the following competencies:

Component Two	Pattern Coefficient
2. Ability to write logically.	.46
10. Develop materials for a set of objectives.	.95
15. Establish classroom routines and procedures.	.64
17. Identify and handle classroom misbehavior problems.	.78

These four items crossed the areas of Communication Skills, Technical Skills, and Administrative Skills. These items appear to be most closely related to the Area of establishing an Atmosphere for Instruction.

The third component was comprised of the following competencies:

Component Three	Pattern Coefficient
1. Orally communicate.	.62
3. Comprehend a message.	.47
4. Read and understand professional material.	.56
13. Direction for carrying out instructional activity.	.96
14. Classroom tests.	.52
18. Records of student progress.	.45

This component spanned the original areas of Communication Skills, Technical Skills, and Administrative Skills. It appears to be a junior high school version of The Fundamental Tools of Education.

Component four for the junior high school sample was defined by the following teaching competencies:

Component Four	Pattern Coefficient
2. Demonstrate the ability to write.	-.52
5. Add, multiply and divide.	.33
6. Awareness of physical and social development in students.	.56
11. Select and sequence learning activities for an objective.	.31
16. Formulate a standard for behavior in the classroom.	.59

This factor relates to the original C.O.T.E. areas of Basic General Knowledge, Technical Skills, and Administrative Skills. It appeared to be a second version of Fundamental Tools of Education.

Component five was defined by the following competencies:

Component Five	Pattern Coefficient
8. Identify long-range goals.	.77
9. Construct short-range goals.	.77

Both of these items were part of the original C.O.T.E. subset of Technical Skills but this was a clear Planning factor.

The final junior high component was defined by the following variables:

Component Six	Pattern Coefficient
1. Orally communicate.	.38
2. Ability to write.	.31
3. Comprehend and interpret messages.	-.28
6. Awareness of physical and social patterns.	.36
7. Diagnose entry level skills.	.72

The dimension cut across the areas of Communication Skills, Basic General Knowledge, and Technical Skills. This appeared to be a third version of the Fundamental Tools of Education.

The junior high school solution did not appear as well focused as the previously interpreted pattern matrix. Two of the competencies yielded

fairly low individual MSA's--number eight, "Identify long-range goals for a given subject area," and number twenty-two, "Demonstrate instructional and social skills which assist students in interacting constructively with their peers." In addition several of the items yielded unacceptable factorial complexity:

Item		IFS
2.	Demonstrate the ability to write.	.39
3.	Comprehend and interpret messages.	.41
4.	Read and understand professional material.	.46
5.	Add, multiply and divide.	.39
11.	Select and sequence learning activities for an objective.	.40
12.	Establish rapport by using verbal and/or visual motivational devices.	.43
14.	Classroom tests.	.44
18.	Records of student progress.	.50

The results of the image analysis for the high school sample (N = 69) are presented in Table V. As before, the sampling adequacy and factorial simplicity of the matrix were well above the acceptable range (MSA = .86, IFS = .88).

Component one was dominated by the following variables:

Component One		Pattern Coefficient
1.	Demonstrate ability to orally communicate.	-.72
2.	Ability to write.	1.00
3.	Comprehend and interpret a message.	1.00
10.	Adopt instructional methods for a set of objectives.	.53
13.	Directions for an instructional activity.	.60

This was generated from the areas of Communication and Technical Skills, and it appears to be the high school version of Fundamental Tools of Education.

Component two was comprised of the following competencies:

Component Two	Pattern Coefficient
12. Establish rapport.	.55
17. Behavior problems.	.59
22. Help student interact with peers.	.56

This dimension at the high school level was best termed Adaptive Behavior.

The third component was defined by the following two competencies:

Component Three	Pattern Coefficient
20. Dignity and worth of other people.	.77
23. Develop own values, attitudes and beliefs.	.94

These variables were related to Interpersonal Skills - The Teacher as Counselor.

The fourth factor for the high school sample was defined by:

Component Four	Pattern Coefficient
8. Long-range goals.	.83
9. Construct and sequence short-range goals.	1.00
10. Materials for objectives.	.45
11. Sequence learning activities.	.37
14. Classroom tests.	.37

These items were all originally identified as Technical Skills.

The fifth high school component was composed of two variables:

Component Five	Pattern Coefficient
15. Establish a set of classroom routines and procedures for physical movement.	.77
16. Formulate standards for student behavior.	.59

This component was a subset of Administrative Skills and appeared to be related to generalized Behavior Standards.

None of the high school items exhibited markedly low individual Measures of Sampling Adequacy but several exhibited inferior Indices of Factorial Simplicity:

Item		IFS
5.	Add, multiply and divide.	.48
6.	Awareness of physical and social patterns.	.55
10.	Adopt instructional methods for a set of objectives.	.50
11.	Select and sequence learning activities for an objective.	.53
14.	Classroom tests.	.56
18.	Records of student progress.	.22
21.	Assist student in developing a positive self-concept.	.31
22.	Helping students get along with peers.	.50

A summary of the component results for the total and sample groups would reveal the following framework:

TOTAL	ELEMENTARY	JR. HIGH	HIGH SCHOOL
Fundamental Tools of Education	Interpersonal Skills	Interpersonal Skills	Fundamental Tools of Education
Interpersonal Skills	Technical Skills	Atmosphere for Instruction	Adaptive Behavior
Technical Skills	Fundamental Tools of Education	Fundamental Tools of Education I	Interpersonal Skills
		Fundamental Tools of Education II	Technical Skills
		Planning	Behavior Standards
		Fundamental Tools of Education III	

The summary of the component labels reveals some obvious intuitive correspondence. The areas which appear to be most common across the groups are:

1) Fundamental Tools of Education
2) Interpersonal Skills, and
3) Technical Skills

As noted earlier, a further test of the components' congruence was conducted with the Wrigley-Newhouse congruency coefficients. Those results are presented in Table VI, which presents a summary of the obtained congruency coefficients among each of the subgroups and the total sample components. It may be observed that there was a very high correspondence for the total-elementary comparison. Each column of the matrix produced a coefficient well above .9. The total-junior high comparison for each of the columns produced high values of .74, .84 and .69 respectively. The total-high school comparison produced high values of .73, .53, and .82 respectively. It is obvious that the common components in the data were the three identified earlier.

The congruence coefficients among the subgroup components are presented in Table VII. It may be observed that the elementary-junior high comparison yielded high values of .76, .57 and .66. The elementary-high school comparison showed high obtained values of .67, .76 and .71. The junior high-high school comparison showed three high values (.69, .60 and .76). It seems clear from the results presented in Tables VI and VII that there was substantial similarity in the underlying dimensions of the perceptions of this sample of teachers regarding the competencies outlined by the Council on Teacher Education.

With the conceptual and empirical determination of the component similarity for the three samples of teachers, the components scores were determined for the sample of sixty in each group. The scores for the total sample were scaled to have a mean of 50 and a standard deviation of 10. The means, standard deviations, and intercorrelations among the scales are presented in Table VIII. It may be observed that there were substantial correlations among the scores with a high of .83 and a low of .81. The results of the multivariate test of the mean component score vectors are presented in Table IX. The associated probability of their equality was less than .0076 so equivalence cannot be accepted. Inspection of the univariate and step down probabilities will show a significant difference among the groups for Fundamental Tools of Education. The means from Table VII will show that the high school group exhibited the highest value ($\bar{X}$ = 52.60) with the elementary group next ($\bar{X}$ = 50.43) and the junior high sample having the lowest value ($\bar{X}$ = 49.67). The univariate F ratios revealed no further significant differences. The step down value, however, for Interpersonal Skills showed a significant difference for the groups. It must be assumed from these data then that there are significant statistical differences among the teacher groups and that those differences arise from disagreement over the Fundamental Tools of Education and Interpersonal Skills.

The final phase of this study was to content analyze the data collection device or instrument used in each county of Florida in order to determine present emphases with respect to the areas defined by the C.O.T.E. competencies. Assuredly the process is a subjective one and the authors accept full responsibility for those decisions. Since the form and format

was virtually unique to each county, it was virtually impossible to adopt any uniform decision rule with respect to the instruments. The classificatory rationale for the assessment was on the emphases of each of the instruments. Many of the forms had at least some questions covering each of the areas, but only those of heaviest emphasis were identified for the purposes of this paper. Heavy emphasis was subsequently defined as a "large" portion of items relating to a particular area. "Large" was defined as which ranked first, second, third, etc. since the format would allow no simple, common, decision rule. Where emphasis was found outside the C.O.T.E. areas for a particular county, an additional notation was made.

There is contained in Table X the results of the content analysis. It may be observed that the present emphasis in the county districts is placed on Technical Skills. Fifty-four of the counties (81%) placed importance on this behavior. Twenty-three of the counties (34%) placed some emphasis on Interpersonal Skills. One county stressed Communication Skills and emphasized Administrative Skills. It may be observed from the final column of Table X other areas were also considered in teacher evaluation. Twenty (31%) of the districts considered personal characteristics in the evaluation of their teaching force. The final area where some emphasis was placed was related to compliance with school and district policies. These results suggest that the school districts in the State of Florida at present place overwhelming emphasis for teacher evaluation upon such behaviors as diagnosis of knowledge levels, the identification and structuring of objectives, the adoption of instructional materials,

and classroom assessment. The secondary emphasis is placed on counseling and interpersonal skills which help a student develop a healthy self-concept and to develop values and attitudes which will facilitate efficient and effective functioning with other individuals. A strong emphasis is also placed upon the appearance and mannerisms of teachers. The areas for which virtually no provision was found were Communication Skills, Basic General Knowledge, and Administrative Skills.

Summary

After a diligent research effort, the Council on Teacher Education of the State of Florida has proposed twenty-three competencies which are ostensibly essential to a successful teacher. Those behaviors were compiled through a large scale survey of professional educators in the State who generally indicated a degree of consensus regarding them. Those competencies, if adopted for training and evaluative purposes, could have far reaching impact upon teacher education and staff development programs. Taken at face value they constitute a clearcut statement of what a successful teacher should be able to do and may form a basis of teacher evaluation. Further, assessment on a district-wide basis might produce the basis of a staff development program design. Each of the statements outlines a specific behavior and apparently they conform to a definite generic organization.

It is clear, however, that any set of teaching competencies which have the potential for statewide adoption will have their validity scrutinized with great intensity. Few aspects of the educational sector have been studied with the fervor of teacher effectiveness. Armies of social scientists from innumerable studies have gathered data on the topic. Yet the question

of "what is an effective teacher?" remains answered only in the most general sense. In the main those results have been largely ineffectual for teacher education guidelines and have provided little in the way of help for a teacher who wants to improve his or her teaching skills. It would be a vast understatement to say that results of current research on teacher effectiveness are largely inconclusive. The lack then of a realistic model for effective teaching has caused training institutions to virtually at random change programs, standards and curriculum and change them back again. A similar vacilation can be documented with respect to staff development programs.

Obviously these problems extend to teacher evaluation. The diminishing demand for teachers in the face of dwindling economic resources have created an increasing concern on just how can a teacher's job performance be accurately and equitably evaluated. With the age of accountability and the advent of collective bargaining, the results of evaluation procedures take critical importance to teachers, administrators, and other school personnel. Should a teacher's evaluation be based on the academic performance of her students, by the public, by examination or not at all? Surely proponents for each of those positions may be found. None of them, however, can provide overwhelming evidence that their point of view commands unanimous adoption. At present the consequence seems to be an indication that evaluation procedures will be negotiated at the bargaining table.

We have attempted in this study to gather further evidence regarding twenty-three competencies which are likely to have a serious impact on public

education in the State of Florida and possibly the nation. For if these competencies prove to be successful, surely other states will use them as the basis of their programs. We simply obtained responses from a cross section of teachers to assess whether or not what the Council on Teacher Education has proposed can for a second time obtain a favorable mandate. The format of the C.O.T.E. study, however, has permitted us to expand upon their results by answering some additional questions. First, we attempted to determine if there was general support for the C.O.T.E. competencies. Secondly, we sought to assess the existence of any substantial disagreements among elementary, junior high, and high school teachers as to their importance. Thirdly, we sought to determine the underlying organizational dimensions of the perceptions of the teachers toward the twenty-three competencies. Given that C.O.T.E. had provided a conceptual schema for them, this procedure was intended to validate that framework. In addition we sought to determine if that dimensionality was similar for elementary, junior high and high school teachers. Next the equality of congruent component scores was tested for the three groups. Finally, the status of present evaluation practices with respect to C.O.T.E. guidelines in the Florida school districts was determined thus hopefully providing them with some needed direction should the competencies be implemented as policy.

One must be careful to remember that the teachers were asked to specify the degree to which the competencies were essential. The results of this study would indicate that there is a general consensus that teachers feel that they are essential for a good teacher. Clearly none of them was viewed as decidedly unessential. The only possible important area of disagreement

among the teaching groups might be viewed in that elementary teachers saw the ability to comprehend and interpret messages after listening as being substantially less essential than did the other two groups. Most other discrepancies should be viewed as negligible.

Although there were some additional components for junior and senior high school teachers, there were three basic and underlying dimensions for the competencies. They were: Fundamental Tools of Education, Interpersonal Skills, and Technical Skills. These components cut across several of the six C.O.T.E. areas, suggesting that there are fewer general areas than hypothesized. A rethinking of the a priori areas appears warranted. To our way of thinking less elaborate solutions are more desirable. There appear to be, however, some significant differences among the teacher groups with respect to at least two of the three constructs--Fundamental Tools of Education and Interpersonal Skills. The present emphasis of the districts in terms of teacher evaluation place heavy relevance upon the areas of Technical Skills, Interpersonal Skills and Personal Characteristics.

So from the results of this study it might be concluded that:

1. Teachers view the C.O.T.E. competencies as essential.
2. There are probably not as many general areas as the Council has proposed or they are so highly related that making the distinction is not productive.
3. There is some communality of the areas across teaching levels.
4. There are differences in the perceptions of the areas among the various teaching level groups.
5. At present the Florida county districts are generally placing emphasis on two of the areas specified by C.O.T.E.

It seems important here to make further note of the complexity of the responses to several of the categories. This is typified by item seventeen relating to the handling and disposition of discipline "problems." It seems clear that part of the teacher population views this as a skill--something learned and developed. This is probably most closely related to treating the action of the child as the problem. The second segment views discipline as a counseling problem. These individuals would most likely wish to deal with the root cause rather than the behavior itself. Several other of the competencies exhibited this characteristic in that there was no clear assignment of them to any categorical scheme. This is symptomatic of much research on teacher effectiveness. Although the desired behaviors appear to be very discrete and have a clear a priori organizational framework, often they are not viewed that way by the teachers. In some cases categorization may be an inappropriate decision rule.

As mentioned earlier, twenty-five teachers in the sample refused to participate in the study. This was also experienced in the original developmental work. Typical comments were:

> "I should like to know more about how this form and information will be used before responding."
>
> "I need to know more about the background of this before I give my opinion. How will this be used? Aren't these things taught anyway in our colleges and universities and in teacher training classes at these schools??? I thought they were."
>
> "I feel unable to do this at this time, as use of results of this survey are not clearly defined."
>
> "I do not wish to be involved with accountability."

> "I do not think enough information has been given as to the proposed use of these competencies. I think a representative is needed to discuss its use in our school. I would also like to see an accountability checklist for our superintendent and his staff."

Those might be taken to represent an underlying mistrust of anything which smacks of teacher accountability. Although we have concluded that our sample gives inferential results that teachers view the competencies as essential, this is certainly not a unanimous opinion. Some teachers are very suspicious about the use of such competencies.

The results of this by no means answers the question of the validity of the Florida Council on Teacher Education competencies. They do, however, point to some next steps which might be taken toward the clarification and validation of their use. It must be remembered that we asked the teachers only to specify the degree to which they thought the competencies were essential. We had them specify nothing with respect to the way they could or should be evaluated--or if such evaluation was even possible. We have provided some rough evidence that such things as teacher competencies are important to teachers. They may reject them when it comes to evaluation time. Careful scrutiny must be given to the manner by which data are gathered. Who will design the devices, how will they be administered, what use will be made of the results. All of these questions must be carefully studied and the answers meticulously extruded from the profession as were the original twenty-three characteristics. At present in Florida the counties are not emphasizing what C.O.T.E. is emphasizing. Substantial realignment appears warranted if the two are to be synchronized. We suspect that some counties

will require substantial assistance in designing appropriate evaluation formats and utilization systems. We trust that the results of this study will provide information of utility for those concerned with competency-based teacher evaluation. This study will be worthless if these data do nothing toward improving teacher effectiveness. We sincerely hope that such will not be the case.

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KEY

FOR THE INTERPRETATION OF TABLE ABBREVIATIONS

SMC = Squared Multiple Correlation

MSA = Measure of Sampling Adequacy

IFS = Index of Factorial Simplicity

RMS = Root Mean Square Correlation

Table I

Individual Competency Means and Standard Deviations

			$\bar{X}$	σ
1.	Demonstrate the ability to communicate orally.	E	3.56	.87
		J	3.61	.81
		H	3.57	.99
2.	Demonstrate the ability to write.	E	3.31	.98
		J	3.29	1.03
		H	3.11	1.12
3.	Demonstrate the ability to comprehend and interpret a message.	E	2.26	1.03
		J	3.39	.86
		H	3.34	1.03
4.	Demonstrate the ability to read.	E	3.09	.98
		J	3.05	1.09
		H	3.09	.94
5.	Demonstrate the ability to add, subtract, multiply and divide.	E	3.40	.95
		J	3.31	.98
		H	3.05	1.07
6.	Awareness of physical and social development in students.	E	3.25	.91
		J	3.15	.87
		H	3.11	.95
7.	Diagnose entry level skills.	E	3.13	1.00
		J	3.02	.79
		H	2.82	1.15
8.	Identify long-range goals.	E	2.86	1.15
		J	3.11	1.02
		H	3.04	1.06
9.	Construct short-range goals.	E	2.86	1.21
		J	3.14	.94
		H	3.08	1.01
10.	Select, adopt and/or develop instructional materials for a given set of objectives.	E	3.18	1.01
		J	3.38	.80
		H	3.25	.99
11.	Select/develop instructional materials appropriate for a given set of instructional objectives.	E	3.17	.99
		J	3.23	.93
		H	3.20	.97

Table I

Individual Competency Means and Standard Deviations (cont'd)

			X	σ
12.	Establish rapport using verbal and visual devices.	E	3.45	.87
		J	3.31	.89
		H	3.39	.97
13.	Present directions for carrying out an instructional activity.	E	3.42	.94
		J	3.51	.81
		H	3.31	.97
14.	Construct a classroom test to measure student performance.	E	3.11	.98
		J	3.26	.92
		H	3.11	1.04
15.	Establish classroom routines and procedures.	E	3.24	.98
		J	2.97	1.09
		H	2.96	1.16
16.	Formulate a standard for student behavior in the classroom.	E	3.50	.89
		J	3.45	.97
		H	3.30	1.09
17.	Identify and handle classroom misbehavior problems.	E	3.75	.77
		J	3.41	.75
		H	3.06	1.41
18.	Records of student progress.	E	3.14	.93
		J	3.31	.78
		H	2.93	1.36
19.	Counsel students both individually and collectively concerning their academic needs.	E	3.08	.97
		J	3.20	.78
		H	2.93	1.35
20.	Identify and/or demonstrate behavior which reflects a feeling for worth of other people.	E	3.22	.01
		J	3.25	.79
		H	2.98	1.39
21.	Demonstrate social skills which assist students in developing a positive self-concept.	E	3.29	1.05
		J	3.29	.84
		H	2.95	1.42
22.	Demonstrate instructional and social skills which assist students in interacting with peers.	E	3.11	1.08
		J	3.15	.93
		H	2.67	1.42
23.	Demonstrate teaching skills to assist in developing values, attitudes and beliefs.	E	3.11	1.12
		J	3.00	1.14
		H	2.82	1.51

Graph 1

Competency Means

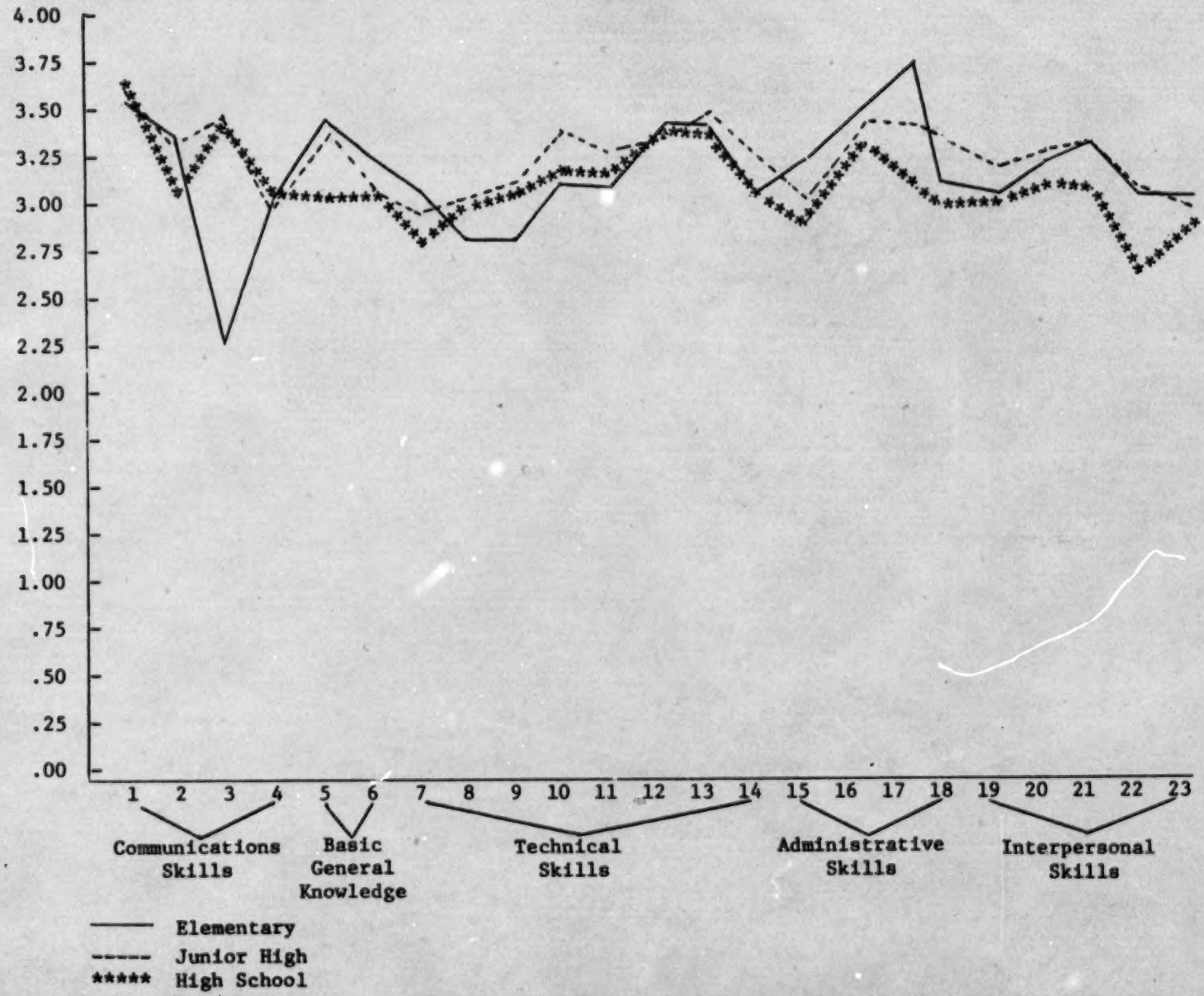

Table II

Derived Image Components
Total Sample

	Component 1	Component 2	Component 3	SMC	MSA	IFS	RMS
1. Demonstrate the ability to communicate orally.	.83	.13	.07	.67	.96	.94	.55
2. Demonstrate the ability to write.	1.03	-.06	-.28	.61	.95	.86	.51
3. Demonstrate the ability to comprehend and interpret a message.	.58	-.13	.20	.53	.96	.73	.47
4. Demonstrate the ability to read.	.71	-.10	.04	.53	.96	.96	.47
5. Demonstrate the ability to add, subtract, multiply and divide.	.84	-.32	.07	.54	.95	.79	.46
6. Awareness of physical and social development in students.	.44	.02	.29	.59	.97	.55	.52
7. Diagnose entry level skills.	.43	.05	.22	.53	.96	.63	.48
8. Identify long-range goals.	-.08	.26	.56	.56	.95	.77	.48
9. Construct short-range goals.	-.26	.11	.90	.64	.94	.90	.50
10. Select, adopt and/or develop materials for objectives.	.05	.00	.80	.76	.95	.99	.57
11. Select/develop instructional materials for instructional objectives	-.11	.03	.89	.71	.94	.98	.54

Table II (Cont'd)

	Component 1	Component 2	Component 3	SMC	MSA	IFS	RMS
12. Establish rapport.	.54	.03	.18	.59	.96	.80	.52
13. Present directions for activity.	.71	-.14	.14	.58	.96	.87	.51
14. Classroom tests.	.26	-.14	.63	.65	.95	.80	.52
15. Establish routines and procedures.	.40	-.11	.42	.62	.95	.48	.50
16. Formulate standards for behavior.	.50	.02	.26	.66	.95	.64	.53
17. Identify and handle misbehavior.	.72	.40	-.27	.76	.95	.48	.57
18. Records of student progress.	.49	.31	-.08	.56	.96	.56	.48
19. Counsel concerning academic needs.	.40	.59	-.21	.65	.96	.48	.51
20. Identify/demonstrate feeling for worth of other people.	.00	.86	.00	.77	.94	1.00	.53
21. Social skills for developing self-concept.	.07	.79	-.02	.73	.95	.99	.53
22. Skills to assist students in interacting with peers.	-.05	.87	.04	.78	.94	.99	.53
23. Skills in developing values, attitudes and beliefs.	-.13	.81	.16	.72	.94	.91	.51

Overall RMS = .51
Overall MSA = .95
Overall IFS = .90

Component Intercorrelations

	1	2	3
1			
2	.59		
3	.72	.81	

Table III

Derived Image Components
Elementary School Sample

	Component 1	Component 2	Component 3	SMC	MSA	IFS	RMS
1. Demonstrate the ability to communicate orally.	-.02	.02	.81	.72	.96	1.00	.57
2. Demonstrate the ability to write.	.09	-.38	1.00	.69	.93	.83	.51
3. Demonstrate the ability to comprehend and interpret a message.	-.14	.06	.76	.58	.96	.96	.49
4. Demonstrate the ability to read.	-.01	-.08	.97	.62	.93	.99	.50
5. Demonstrate the ability to add, subtract, multiply and divide.	-.14	-.10	.67	.71	.93	.97	.52
6. Awareness of physical and social development in students.	.02	.12	.20	.68	.96	.96	.56
7. Diagnose entry level skills.	.20	.38	-.00	.58	.95	.50	.51
8. Identify long-range goals.	.16	.60	-.05	.63	.94	.93	.49
9. Construct short-range goals.	-.06	.87	.00	.73	.93	.99	.51
10. Select, adopt and/or develop materials for objectives.	-.02	.91	-.12	.83	.94	1.00	.58
11. Select/develop instructional materials for instructional objectives	.01	.98	.40	.83	.92	.98	.56

Table III (Cont'd)

	Component 1	Component 2	Component 3	SMC	MSA	IFS	RMS
12. Establish rapport.	-.00	.42	.52	.72	.93	.50	.55
13. Present directions for activity.	-.02	.27	.14	.65	.94	.73	.53
14. Classroom tests.	-.01	.65	.36	.66	.95	.93	.52
15. Establish routines and procedures.	-.06	.48	.53	.67	.96	.53	.53
16. Formulate standards for behavior.	.15	.21	.21	.76	.95	.76	.59
17. Identify and handle misbehavior.	.79	-.11	-.10	.84	.92	.82	.58
18. Records of student progress.	.76	.11	.01	164	.96	.92	.49
19. Counsel concerning academic needs.	.82	.01	-.11	.76	.95	1.00	.55
20. Identify/demonstrate feeling for worth of other people.	.98	.02	.10	.85	.94	.97	.56
21. Social skills for developing self-concept.	.85	-.09	-.02	.80	.95	.95	.56
22. Skills to assist students in interacting with peers.	.89	.01	-.09	.84	.92	1.00	.56
23. Skills in developing values, attitudes and beliefs.	.85	.10	-.09	.76	.96	.95	.56

Overall RMS = .54
Overall MSA = .94
Overall IFS = .95

Component Intercorrelations

	1	2	3
1			
2	.59		
3	.72	.81	

Table IV

Derived Image Components - Junior High School Sample

	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Comp 6	SMC	MSA	IFS	RMS
1. Demonstrate the ability to communicate orally.	.13	-.18	.62	-.10	.00	.38	.67	.82	.56	.37
2. Demonstrate the ability to write.	.22	.46	.34	-.52	.05	.31	.62	.84	.39	.36
3. Demonstrate the ability to comprehend and interpret a message.	.12	.32	.47	.03	.15	-.28	.64	.88	.41	.40
4. Demonstrate the ability to read.	.07	-.20	.50	-.05	.25	.17	.48	.83	.46	.31
5. Demonstrate the ability to add, subtract, multiply and divide.	-.25	-.01	.27	.33	.11	.24	.65	.86	.39	.39
6. Awareness of physical and social development in students.	.04	-.06	-.05	.56	-.03	.36	.65	.85	.65	.38
7. Diagnose entry level skills.	.11	-.02	-.11	.06	.07	.72	.61	.75	.97	.32
8. Identify long-range goals.	.09	-.03	-.17	-.01	.77	.12	.74	.66	.93	.32
9. Construct short-range goals.	-.04	.11	.13	-.06	.77	-.12	.73	.74	.92	.35
10. Select, adopt and/or develop materials for objectives.	-.16	.95	-.20	.08	.12	-.06	.81	.78	.87	.43
11. Select/develop instructional materials for instructional objectives.	-.18	.36	-.12	.31	.25	.01	.63	.78	.40	.35

Table IV (Cont'd)

		Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Comp 6	SMC	MSA	IFS	RMS
12.	Establish rapport.	.23	.20	.14	.30	-.15	-.07	.46	.83	.43	.32
13.	Present directions for activity.	.15	-.08	.96	-.02	-.10	-.09	.75	.79	.93	.39
14.	Classroom tests.	-.19	-.05	.52	.27	.20	.13	.81	.86	.44	.45
15.	Establish routines and procedures.	.09	.64	.22	-.20	-.04	.08	.71	.76	.68	.39
16.	Formulate standards for behavior.	-.13	.24	.10	.59	.22	.06	.71	.74	.75	.38
17.	Identify and handle misbehavior.	.12	.78	.24	-.15	-.22	.07	.78	.82	.68	.43
18.	Records of student progress.	-.14	.18	.45	.31	-.07	-.07	.71	.80	.50	.38
19.	Counsel concerning academic needs.	.29	-.09	.02	.65	-.02	-.21	.61	.77	.78	.32
20.	Identify/demonstrate feeling for worth of other people.	.54	.04	.15	.20	.17	-.41	.73	.79	.52	.34
21.	Social skills for developing self-concept.	.85	-.02	-.15	.04	.02	.10	.85	.71	.87	.34
22.	Skills to assist students in interacting with peers.	.96	-.08	.14	-.05	.00	-.06	.88	.66	.92	.35
23.	Skills in developing values, attitudes and beliefs.	.63	.26	-.35	.20	-.02	.15	.82	.71	.36	.37

Overall RMS = .37
Overall MSA = .78
Overall IFS = .80

Component Intercorrelations

	1	2	3	4	5	6
1						
2	.36					
3	-.01	.69				
4	.46	.70	.60			
5	.56	.56	.33	.55		
6	.05	.54	.67	.54	.29	

Table V

Derived Image Components - High School Sample

	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	SMC	MSA	IFS	RMS
1. Demonstrate the ability to communicate orally.	.72	.25	.15	-.17	-.07	.82	.94	.66	.57
2. Demonstrate the ability to write.	1.00	-.07	-.02	-.19	.04	.73	.93	.91	.52
3. Demonstrate the ability to comprehend and interpret a message.	1.00	-.27	-.13	-.09	-.05	.62	.88	.86	.41
4. Demonstrate the ability to read.	.93	-.32	-.42	.09	.08	.44	.86	.61	.30
5. Demonstrate the ability to add, subtract, multiply and divide.	.40	.22	-.45	.08	.06	.41	.81	.48	.27
6. Awareness of physical and social development in students.	-.15	.41	-.05	.41	-.08	.55	.81	.55	.35
7. Diagnose entry level skills.	.10	.55	-.18	.16	.06	.66	.82	.74	.44
8. Identify long-range goals.	-.15	.12	-.09	.83	-.05	.62	.86	.95	.40
9. Construct short-range goals.	-.23	-.10	-.14	1.00	.04	.70	.78	.95	.35
10. Select, adopt and/or develop materials for objectives.	.53	-.18	.19	.45	-.02	.84	.91	.50	.57
11. Select/develop instructional materials for instructional objectives.	.40	-.03	.20	.37	-.01	.78	.94	.53	.55

Table V (Cont'd)

	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	SMC	MSA	IFS	RMS
12. Establish rapport.	.22	.59	.05	-.07	-.08	.68	.87	.82	.47
13. Present directions for activity.	.60	.16	.00	-.03	.11	.80	.85	.79	.52
14. Classroom tests.	.32	.09	.02	.37	.12	.72	.93	.56	.54
15. Establish routines and procedures.	.11	-.02	.04	-.02	.77	.78	.84	.99	.46
16. Formulate standards for behavior.	-.27	.25	.24	.08	.59	.77	.81	.78	.45
17. Identify and handle misbehavior.	-.05	.97	-.10	-.05	.07	.84	.83	.97	.53
18. Records of student progress.	.40	.36	-.38	.11	.21	.65	.87	.22	.46
19. Counsel concerning academic needs.	-.00	.72	.01	-.07	-.21	.48	.89	.80	.35
20. Identify/demonstrate feeling for worth of other people.	.03	.17	.77	.07	-.17	.83	.84	.81	.50
21. Social skills for developing self-concept.	.24	.14	.25	.31	-.14	.70	.92	.31	.49
22. Skills to assist students in interacting with peers.	.05	.56	.36	.06	-.23	.73	.86	.50	.51
23. Skills in developing values, attitudes and beliefs.	-.00	-.13	.94	-.07	.13	.86	.71	.97	.45

Overall RMS = .46
Overall MSA = .86
Overall IFS = .88

Component Intercorrelations

	1	2	3	4	5
1					
2	.88				
3	.71	.71			
4	.76	.70	.59		
5	.64	.71	.59	.53	

Table VI

Congruency Coefficients for the Total and Subgroup Samples

ELEMENTARY	TOTAL		
	Fundamental Tools of Education	Interpersonal Skills	Technical Skills
Interpersonal Skills	.15	.96	-.03
Technical Skills	.08	-.07	.98
Fundamental Tools of Educ.	.93	-.10	.05

JUNIOR HIGH	TOTAL		
	Fundamental Tools of Education	Interpersonal Skills	Technical Skills
Interpersonal Skills	.09	.84	-.07
Atmos. for Instruction	.34	.13	.38
Fund. Tools of Educ. I	.74	-.09	.03
Fund. Tools of Educ. II	.20	.29	.27
Planning	-.11	.08	.69
Fund. Tools of Educ. III	.44	-.04	.06

HIGH SCHOOL	TOTAL		
	Fundamental Tools of Education	Interpersonal Skills	Technical Skills
Fund. Tools of Educ.	.73	-.02	.14
Adaptive Behavior	.41	.54	-.01
Interpersonal Skills	-.21	.57	.11
Technical Skills	-.04	.18	.82
Behavior Standards	.32	-.18	.19

Table VII

Congruency Coefficients Among the Subgroup Components

JUNIOR HIGH	ELEMENTARY Interpersonal Skills	Technical Skills	Fundamental Tools of Education
Interpersonal Skills	.76	-.09	.10
Atmosphere for Instruction	.22	.44	.21
Fund. Tools of Educ. I	.05	.09	.66
Fund. Tools of Educ. II	.32	.24	.11
Planning	-.02	.57	.04
Fund. Tools of Educ. III	-.08	.05	.45

HIGH SCHOOL	ELEMENTARY Interpersonal Skills	Technical Skills	Fundamental Tools of Education
Fund. Tools of Educ.	.07	.15	.71
Adaptive Behavior	.61	.10	.22
Interpersonal Skills	.50	.11	-.23
Technical Skills	.11	.76	.00
Behavior Standards	-.08	.26	.20

JUNIOR HIGH	HIGH SCHOOL Fund. Tools of Educ.	Adaptive Skills	Interp. Skills	Tech. Skills	Behavior Standards
Interpersonal Skills	.15	.35	.60	-.00	-.24
Atmos. for Instruction	.30	.16	.17	.19	.40
Fund. Tools of Educ. I	.69	.23	-.26	-.04	.22
Fund. Tools of Educ. II	-.08	.43	.13	.29	.08
Planning	.13	-.19	-.09	.76	-.12
Fund. Tools of Educ. III	.19	.22	-.21	.10	.15

Table VIII

Means and Standard Deviations and Intercorrelations of the Component Scores

	ELEMENTARY		JUNIOR HIGH		HIGH SCHOOL	
	$\bar{X}$		$\bar{X}$		$\bar{X}$	
Fundamental Tools of Education	50.43	15.19	49.67	12.11	52.60	17.05
Interpersonal Skills	48.47	9.96	49.23	9.77	47.63	11.19
Technical Skills	47.99	10.87	49.55	7.72	46.79	10.05

Scale Intercorrelations

Fundamental Tools of Educ.		
Interpersonal Skills	.81	
Technical Skills	.82	.83

Table IX

Multivariate Test of Significance
F = 2.977, D.F. = 6 and 350, P < .0076

	Mean Prod.	F	P	Step Down F	P
Fundamental Tools of Educ.	591.43	3.43	.03	3.43	.03
Interpersonal Skills	2.93	.02	.97	5.52	.00
Technical Skills	100.106	.67	.51	.06	.94

Table X

Summary of the County District Evaluation Emphases

County	# of Sep. Resp. on Form	Comm. Skills	Basic Gen. Know.	Tech. Skills	Admin. Skills	Interp. Skills	Additional Areas
Alachua	8			X			
Baker	13						Personal characteristics
Bay	13			X		X	Personal characteristics
Bradford	8			X			Personal characteristics
Brevard	72			X			
Calhoun	20			X		X	Personal characteristics
Charlotte	17			X		X	
Citrus	24			X		X	Personal characteristics
Clay	28			X		X	
Collier	13			X			
Columbia	27			X			Personal characteristics
Dade	9			X			
Desoto	24					X	Personal characteristics
Dixie	16			X			
Duval	48			X			

Table X (Cont'd)

County	# of Sep. Resp. on Form	Comm. Skills	Basic Gen. Know.	Tech. Skills	Admin. Skills	Interp. Skills	Additional Areas
Escambia	15			X		X	Personal characteristics
Flagler	21			X			
Franklin	21						Conformity to sch. policies (beh.), good personal characteristics
Gadsden	34			X		X	
Gilcrest	22			X		X	
Glades	10			X			
Gulf	17			X			
Hamilton	43			X			
Hardee	12	X		X			
Hendry	20			X			
Hernando				X			
Highland	24			X			Personal characteristics
Hillsborough	19			X			
Holmes	15			X		X	
Indian River	51			X		X	
Jackson	0						
Jefferson	10			X	X		

Table X (Cont'd)

County	# of Sep. Resp. on Form	Comm. Skills	Basic Gen. Know.	Tech. Skills	Admin. Skills	Interp. Skills	Additional Areas
Lafayette	43			X		X	Personal characteristics
Lee	(17, 23)			X		X	Personal characteristics
Leon	9			X			
Levy	21			X		X	
Liberty	44			X		X	
Madison	41			X			
Manatee	18			X			
Marion*	4						
Martin	8			X			
Monroe	30					X	
Nassau	7						Punctuality
Okaloosa	32			X		X	
Okeechobee	20			X			Personal characteristics
Orange	16			X			
Osceola	50			X			
Palm Beach	37			X		X	
Pasco	56			X			

*Emphases Indeterminant.

Table X (Cont'd)

County	# of Sep. Resp. on Form	Comm. Skills	Basic Gen. Know.	Tech. Skills	Admin. Skills	Interp. Skills	Additional Areas
Pinellas	25			X		X	Personal characteristics
Polk	23			X			
Putnam	21			X			Personal characteristics
St. Johns	13						Personal characteristics
St. Lucie	22			X		X	
Santa Rosa	41			X			
Sarasota*							
Seminole	10	X		X			Total school policy
Sewannee	22			X			Personal characteristics
Sumnter*							
Tavares	25			X		X	Personal characteristics
Taylor	53			X		X	
Union	11			X		X	Personal characteristics, total school program
Volusia	14					X	School policy
Wakulla	30			X			
Walton	31			X		X	
Washington	20						Personal characteristics

*Emphases Indeterminant